

[0016] FIG. 6 is a schematic view of a display for selecting a particular tactile response in accordance with one embodiment of the invention;

[0017] FIG. 7 is a schematic view of a display screen for defining a contact's settings in accordance with one embodiment of the invention;

[0018] FIG. 8 is a flowchart of an illustrative process for providing tactile feedback in response to detecting a particular state of the electronic device in accordance with one embodiment of the invention;

[0019] FIGS. 9A and 9B are illustrative display screens for providing inputs to an electronic device in accordance with one embodiment of the invention;

[0020] FIG. 10 is a schematic view of an illustrative display screen of a page in accordance with one embodiment of the invention;

[0021] FIG. 11 is a schematic view of illustrative display 1000 of FIG. 10 when the display is scrolled in accordance with one embodiment of the invention;

[0022] FIG. 12 is a schematic view of illustrative display 1000 of FIG. 10 when the display is zoomed in accordance with one embodiment of the invention;

[0023] FIG. 13 is a schematic view of an illustrative display screen of a mapping application in accordance with one embodiment;

[0024] FIG. 14 is a schematic view of an illustrative display screen of a mapping application as a user follows a determined path in accordance with one embodiment of the invention; and

[0025] FIG. 15 is a flowchart of an illustrative process for providing tactile feedback in response to receiving a user input in accordance with one embodiment of the invention.

DETAILED DESCRIPTION

[0026] FIG. 1 is a simplified diagram of computer system 100, which can be operated in accordance with the principles of the present invention. In some embodiments, computer system 100 may include electronic device 102 and accessory device 104. Electronic device 102 may include display component 106 and user input component 108.

[0027] Display component 106 is illustrated in FIG. 1 as a display screen that is integrated into electronic device 102. In some embodiments, display component 106 may instead be external to electronic device 102. For example, display component 106 may be a computer monitor, television screen, and/or any other graphical user interface, textual user interface, or combination thereof. Using display component 106, electronic device 102 may display the video portion of video content, one or more images, a user interface for controlling electronic device 102, combinations thereof, or any other suitable display.

[0028] User input component 108 is illustrated in FIG. 1 as a click wheel. One skilled in the art will appreciate that user input component 108 could be any type of user input device that is integrated into or located external to electronic device 102. For example, user input component 108 could also include a mouse, keyboard, trackball, slider bar, one or more buttons, electronic device pad, dial, or any combination thereof. User input component 108 may also include a multi-touch screen such as that shown in FIG. 2 and described in commonly owned Westerman et al., U.S. Pat. No. 6,323,846, issued Nov. 27, 2001, entitled "Method and Apparatus for Integrating Manual Input," which is incorporated by reference herein in its entirety. User input component 108 may

emulate a rotary phone or a multi-button electronic device pad, which may be implemented on a touch screen or the combination of a click wheel or other user input device and a screen. A more detailed discussion of such a rotary phone interface may be found, for example, in commonly owned McKillop et al., U.S. patent application Ser. No. 11/591,752, filed Nov. 1, 2006, entitled "Touch Pad with Symbols based on Mode," which is incorporated by reference herein in its entirety.

[0029] Accessory device 104 can include microphones 110, input buttons 112 and eject button 114. Microphones 110 may be operative to receive audio signals. Circuitry (not shown), which can be included in electronic device 102, accessory device 104, or both can convert the audio signals into one or more audio data files. Buttons 112 can be used to interact with (e.g., edit, save, export, delete, etc.) the audio data files. Eject button 114 can be used to decouple accessory device 104 from electronic device 102.

[0030] Accessory device 104 is shown in FIG. 1 as being physically and electrically coupled to electronic device 102 via a connector component (not shown). In other embodiments, accessory device 104 can be wirelessly coupled to electronic device 102. When accessory device 104 is coupled to electronic device 102, either or both devices may have enhanced functionality. This enhanced functionality may automatically occur in response to the devices being coupled together or in response to a user input. For example, accessory device 104 may not have its own power supply or display screen and only function when it is coupled to electronic device 102. Similarly, electronic device 102 may not have its own microphone(s) or only have a lower fidelity microphone, but when electronic device 102 is coupled to accessory device 104, the circuitry in electronic device 102 can make high fidelity recordings. As another example, specialized circuitry or applications (e.g., for recording and converting audio signals) may only be included in accessory device 104 and not in electronic device 102. Accessory device 104 may also have, for example, limited storage capacity and may need to utilize the storage component(s) of electronic device 102 to store audio data files.

[0031] FIG. 2 shows computer system 200 which can also be used in accordance with the present invention. Computer system 200 includes electronic device 202, which can include, for example, a portable media player, cellular telephone, personal organizer, hybrid of such devices, or any other electronic device. Electronic device 202 may include user interface component 204. User interface component 204 is shown in FIG. 2 as a multi-touch screen that can function as both an integrated display screen and user input device. Electronic device 202 can also include one or more other user interface components, such as button 206, which can be used to supplement user interface component 204.

[0032] Electronic device 202 may include any suitable input and output components. For example, electronic device 202 may include microphone 208 and audio output 210. Microphone 208 may include some or all of the features of microphones 110 discussed above. As such, the audio recording functionality, circuitry and components of accessory device 104 of FIG. 1 can be integrated into electronic device 202. Audio output 210 is shown as being a speaker integrated into electronic device 202, but one skilled in the art would appreciate that audio output 210 may also include an external